

An Address

ON

THE UNBORN CHILD: ITS CARE AND ITS RIGHTS.

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OF recent times much has been heard of the deterioration of our race, the falling birth-rate and the rising death-rate amongst the newborn. There is no need to day to belabour statistics; these are accepted facts; the annual number of births is on the downward grade, and with this the type of the children born is lower both physically and mentally.

In the last fifteen years the fall of the birth-rate has been so great as to lead to a deficiency of a quarter of a million of children in the year.

The death-rate amongst children in the first year of life is but slightly less than it was fifty years ago, whilst the mortality in the first three months of life has actually increased.

On this subject Sir John Gorst writes: "I am assured by doctors who are in actual practice in our cities that . . . they know of streets in which more than half the children born alive perish under a year old," and many members in this room will affirm the truth of that remark.

One is forced to ask: Why has the infantile mortality not shared in the improvement shown by the general death-rate? The betterment of sanitary affairs and general hygiene, the improvement in conditions of work and pay, the increase in the general comforts of life, and the efforts of authorities and societies to check the waste, must have influenced the conditions which led to many of the infantile deaths fifty years ago.

There must be fewer deaths from some causes, and to keep up the average there must be a compensatory increase from other causes; this is shown by the facts that whilst the general death-rate under 1 year has remained about the same, the mortality from the 3rd to the 12th month has steadily dropped, whilst that in the first three months of life has actually increased. Why is this? Two explanations suggest themselves:

1. The agencies which, by their attack on the post natal causes of death—that is, by attention to the care of the child after birth—are producing the reduction of the deaths in the latter months of the first year of infant life do not get to work early enough. At present it is not necessary to register a birth till the child is 6 weeks old, and frequently the birth is not registered until the child is dead! If registration were made compulsory within twenty-four hours of birth, all the present agencies could get to work at once, with a prospect of an immediate fall in the early infantile mortality. It is to be hoped that Lord Robert Cecil's Bill may speedily become law—so amended, of course, as to provide for the payment of a registration fee to the medical practitioner.

2. But there is a second explanation, to which I would specially allude—namely, the increase in the ante-natal causes of post-natal death. We must look to these ante-natal causes as being to no small extent responsible for the maintenance of the high infantile death-rate and its increase in the first three months.

Ballantyne has said:

The question why more babies die in the very earliest days of life has not one but many answers . . . it has always seemed to me that they die also because they should have been dead already, because they were only waiting, as it were, for birth in order to die.

Much valuable work is now being done by those agencies whose object is to promote the proper care of infants. It is no desire of mine to belittle the importance of this work, still I do think that, if we wish to increase the number and enhance the quality of the future population, we must turn our attention to these ante natal causes of post natal death and debility. It has always seemed to

me that the measures taken, if I may so say, to bolster up the lives of unhealthy children after birth are somewhat akin to the propping up, by buttresses, of houses whose foundations are insecure. We must not allow our attention to be diverted from the paramount importance of the foundation, that is, the proper care of the child during its intrauterine existence; and, further, we must beware lest by providing these props we encourage the jerry builder to neglect his foundations and the quality of his materials.

Although, as a matter of fact, the deepest foundations are laid long before conception, the future health and constitution of the child are intimately bound up with the processes which go on during its intrauterine existence. During these nine months influences are at work which profoundly affect the viability and ultimate vitality of the child; indeed, this period has crowded into it more potent influences than any subsequent period of similar duration.

It is needless to remind an assembly of this character of the paramount influences of heredity and of the health of the parents. The origin of the fetus dates back to the origin of our species, and the child at its conception has impressed into it the influences of past generations which take a chief part in the determination of its physical and mental characters, its form and structure, its possibilities and its limitations.

Of these things I do not intend to speak, except to note the fact that by recognizing their truth and directing our observations accordingly, we shall help to strengthen the links of that vast chain with which we are concerned.

Coming nearer to the immediate subject of to day, we observe that as naturally the infant depends for its chance of health upon the germ plasm of its immediate parents, this must be a matter of concern to us. The subject of germinal therapeutics involves the consideration of matters of grave public concern. Not only does it include the treatment of the parents, but it includes the pressing question of the limitation of marriage to the fit. Whether this shall be by the evolution of a healthy public opinion or by legislation is still open to discussion, for the problems of heredity are great, and our information is as yet but slight. It is evident, however, that our present customs are unsatisfactory, and are leading to a state of affairs that can only end in disaster. I fear that public opinion cannot be successfully educated to cope efficiently with the evil, while the question of legislation raises the spectre of the segregation of the unfit, a costly procedure, and one which frightens by its magnitude; on the other hand, the only alternative advanced is one which demands most careful thought, that is, the proposed sterilization of degenerates.

Time will not allow me to do more than allude to this portion of my subject, and I must press on, contenting myself merely by begging you to take these matters into your serious consideration, so that we as a profession may be ready to speak authoritatively and with no uncertain voice on matters of such vital public concern when the time arrives.

Whilst the essential characters are ineffaceably stamped upon the fetus at the moment of its conception, there is no doubt that its future chances are profoundly affected during the period of its intrauterine life. Let us then consider this portion of our subject—the care of the unborn child.

This matter has not received the attention which its importance demands, and public opinion upon it is decidedly wrong, as evidenced by what one sees daily in the press. For example, only a few weeks ago the following words appeared in the *Manchester Evening Chronicle*: "Nature no more goes to the trouble of producing children to die in the first few months than she goes to the trouble of producing plants that fade before they blossom"—a striking misstatement of the facts! The same writer was more correct when he wrote: "It is not natural that children should die any more than that kittens and puppies should die in the first days of existence." Nevertheless they do! Unfortunately, under present social conditions, Nature does go to the trouble of producing children for whom "Birth is but the Gate of Death." If, then, any words of mine, by virtue of the honourable position in which you have placed me to-day—for the time being President of this important Branch of our Association—may lead us to take a more serious

view of our responsibilities as a profession and lead to greater activities, it will be a gratifying and sufficient reward for any work I may have done on your behalf.

Fetal Mortality and Morbidity.

It is an accepted fact that fetal mortality, *i.e.*, the mortality of the child before birth, exceeds that of any other period of life. Probably, too, fetal morbidity occupies a similar position relative to that of any other period of life, and leads to much of that post-natal or "postponed" infantile mortality which is now so much a matter of public concern; and, short of actual post natal death, the same ante-natal causes which make for this diminished viability do leave their permanent marks upon the individuals born in the form of diminished vitality or "congenital debility." They may not be sufficiently powerful to lead to death, but they may so lower the vitality of the child that it falls an easy prey to the causes of death to which a child of normal health would not succumb, or they may render it a less useful member of society by reason of its "congenital debility."

As John Burns tersely puts it, "the causes which carry so many away leave so many behind unfitted for the life before them." I am convinced that just as the fetal death-rate is a growing rate, so is there amongst the children born alive a steadily increasing *diminution of vitality due to ante-natal causes.*

In support of this, we find that the average number of infants dying from the accidents of birth, congenital defects, atelectasis, and premature birth, shows a steady upward movement, whilst there is also a steady increase in still-births and abortions. Dr. J. R. Kaye, Medical Officer to the West Riding of Yorkshire County Council, says:

The influences which are responsible for an increasing number of this type—that is, the children who are but born to die—are also responsible for a greatly diminished number of the desirable type; the same influences are increasing the proportion of children who arrive unfitted for life's struggle, with the result that the problem of reducing our infant mortality is being rendered more and more difficult. It is a very important point to observe that the death-rate from "premature birth" did not begin to increase until the general birth-rate began to decline, and since then the two movements have been *inversely proportional.*

England and Wales.

Decade.	Average Annual Birth-rate per 1,000 living.	Ratio of Deaths under 1 Year per 1,000 Births.	
		(a) From all Causes.	(b) From Premature Birth.
1855 to 1864 ...	34.6	154	11.0
1865 to 1874 ...	35.4	155	11.9
1875 to 1884 ...	34.7	144	13.7
1885 to 1894 ...	31.2	145	16.8
1895 to 1904 ...	29.0	150	19.8

The great diminution of the birth-rate demands attention. The fall is not entirely due to increased fetal mortality, however; other factors are at work.

Time will not allow me to speak of them at length, though the increasing relative sterility of marriage, whether voluntary or unintentional, is a matter of concern, for I am convinced of the harmfulness of the modern acceptance of Malthusian doctrines and I am equally convinced that the practice of criminal abortion is a growing one.

The Value of Fetal Life.

The public do not, even now, place a proper estimate upon the life of the unborn child. Amongst uncivilized peoples even of recent times, and probably equally amongst the primitive races of prehistoric times, a very low estimate was placed upon the value of the life of the unborn child; the right of a child to live was dependent upon the available food supply. One writer¹ says, "Our ancestors did not admit a newborn infant had a right to existence. The mother had let it fall to the ground; there it must remain until the head of the family either picked it up himself or permitted others to do so. Before he gave the sign, the object counted as little more than a clod; it was as yet but so much organic clay"; and, further, "When

a woman found herself to be pregnant and saw that there was no probability that the infant would be a welcome addition to the family circle, she in many cases had recourse to the production of abortion."

This practice undoubtedly is common amongst primitive peoples. When we look into the history of the civilized nations we find evidence that the practice similarly prevailed. In the oldest medical work in existence, that is, the Egyptian papyrus of Ebers, B.C. 1550, we find directions for the production of abortion, a receipt being given "to detach or disperse the fetus in the womb"; and even before this the practice must have existed, for it was forbidden by Zoroaster, and in later times was again forbidden in the Hippocratic Oath (B.C. 468).

From the earliest times, then, among civilized nations we may take it that the right of the fetus to live has always been recognized, and the right of the parents to take away that life has never been allowed; nevertheless the practice of procuring abortion prevailed.

We are to day not much more advanced; the right of the fetus to live is recognized by the State, but what do we see in practice? There is no doubt that an important cause of fetal mortality to-day is the artificial induction of abortion.

There is equally no doubt that the public do not, even now, place a proper estimate upon the life of the unborn child, and ignorance of the fact that the child in the womb from the day of its conception is as much a living being, with its individual rights, as at any future period of its existence, is doubtless responsible for much of the destruction of intrauterine life that is happening to-day.

From the economic standpoint, the value of the life of the child *in utero* is enhanced by the present fall in the birth-rate; since fewer children are being born, it follows that the life of the child *in utero* is becoming of higher value, and that it is becoming of greater importance that that life shall be preserved, and that it shall come to fruition.

Hence our responsibilities as practitioners of medicine. We must recognize the appreciation in value of fetal life and the inalienable right of the unborn child to its life. Therapeutic feticide requires to be placed on a modern basis, in view of the advances in the surgery of to-day.

Diminution of Birth-rate.

To some extent this is due to the—

1. Relative sterility of marriages, whether voluntary or unintentional.

(a) *Voluntary.*—The artificial prevention of conception is a growing practice, and materially contributes. If this procedure were due to motives of thrift, something might be said in its favour, but I fear a greater incentive is the love of ease and the modern rush for pleasure, for which the responsibilities of motherhood are being shirked; and as a gynaecologist I would utter a word of warning, for my experience teaches me that this cannot be carried out without in many cases causing permanent damage to the individual.

In a pamphlet issued by a society of midwives, I once read an article which had a striking headline: "Tired Ovaries and Hungry Womb"; but the mischief does not stop there; it goes further still, and carries deeper evils in its train.

Another aspect of this question has been forced upon me, for not infrequently have I been consulted by sterile women anxious and almost obsessed by their anxiety for a child; an investigation shows that, while physically there is no evident condition which precludes the capacity for giving birth to a healthy child, in the earlier years of married life means were taken to prevent conception, with this result: that the individual has destroyed her chance, has sterilized herself by her wilful acts, has been the source of her own undoing, and now has degenerated into a neurasthenic hopeless wreck—hope given in exchange for a ghastly memory.

As medical men it is our duty to set our face against such things, and to advise before it is too late.

(b) *Unintentional Sterility.*—Other sources of the diminished birth-rate are—

1. The lateness of marriages to-day.

2. The relative sterility due to disease, frequently the result of improperly-treated gonorrhoeal and syphilitic infection in the male, and only too frequently the result of induced abortion.

3. Alcohol drinking and modern overeating, of which I shall speak again.

II. Abortion. Another cause which cannot be passed over—a very serious cause, and, I am convinced, a growing cause—of the fall of the birth-rate is the increase in the custom of artificial and criminal abortion—a return to the practice of the primitive races. It is not limited to any class or grade in society; it occurs among the more intellectual as well as among the more uneducated and depraved. Many women who would consider it a crime to use instrumental means, resort to such measures as violent horse exercise or drugs, as I have not infrequently found. Only recently several cases have come under my care in which the patient has herself passed a crochet hook into her uterus, having been instructed in the art by a midwife or a nurse.

Surely it is our duty, as members of a profession among whose highest aims is the saving of life, to raise our voice against the conditions that prevail.

On May 15th last, in a leader which appeared in the *Manchester Evening Chronicle* (from which I have already quoted), headed "Race Murder," the writer, after reference to the diminishing birth-rate and the high infantile mortality, says: "The problem—and it is a serious problem for those who really care what is to become of our race—is not how to encourage people to have children, but how to keep children and bring them up to be clean and healthy men and women." Herein lurks an important fallacy; we see again the recognition of the importance of the proper care of the newborn, but an utter disregard for the proper care of the unborn child. The writer is to some extent right when he says "the problem is not how to encourage people to have children," but he would have been much more nearly correct had he written "the problem is how to encourage people to have healthy children"—a problem embracing the whole question of the care of the unborn child, which resolves itself into the care of the expectant mother in relation to the interests of the child and its rights.

Just as the proper feeding and suitable environment of the newborn child, still in process of growth and development, are relatively of more importance than in the case of the adult, so the proper nourishment and environment of the unborn child is of more vital importance still, for slight departures from what is beneficial may have much more far-reaching effects.

In considering this matter, it is well to keep before us a picture of what is going on inside the uterus after conception has occurred.

The time of intrauterine existence may be divided into three periods:

1. The germinal—that part which concerns the union of the male and female cells and the first beginnings of the embryo.

2. The embryonic—specially concerned with the formation of the organs (organo-genesis).

3. The fetal—more especially concerned with growth; but the last two stages are not abruptly separate and distinct, for part of the organo-genesis continues into the third or fetal period, and even into the period of life after birth.

Each of these periods has its own pathological tendencies. The first has to do with hereditary tendencies and irregular growths of the ovum; in the second are produced malformations and monstrosities; while the third evolves diseases similar to those of the child after birth; just as at birth there is a critical time for the child, which must now adapt itself to new conditions—including the loss of the placental function—its capacity for independent existence being put to the test, so there is during intrauterine life a corresponding time of risk—namely, the transition from the embryonic to the fetal stage, when the placental function is established, a time at which we know the risks of pregnancy coming to an untimely end are great.

Now, all this time the child *in utero* derives its food—its whole food and its only food—from the mother's blood and tissues. The state of the mother's health and of her blood must profoundly affect the child within her womb. If these are good, it will be well for the child; if these are bad, whether as the result of poverty, starvation, and overwork, or as the result of injudicious food, excess, or irregularity of life, it will be bad. It is an established physiological observation that the healthy development

of the child depends upon the healthy performance of its mother's functions; but one not infrequently hears it said, in a most comfortable sort of way, that the child always thrives even at its mother's cost. Though sometimes this would seem to be the case, it is not always so; I could instance many a case where the future ill-health of the child has had its origin and its cause in the ill-health of its mother during pregnancy.

Surely, then, we must recognize the *right of the unborn child to conditions which shall make for the safeguarding of its health*. Although the human embryo is placed under such favourable conditions, still it is possible for its surroundings to be injuriously affected, and for injury to reach the child. We know very little about this as yet, but experimental work has shown that very slight change of surroundings can harmfully affect a growing embryo.

1. It is only necessary to recall the classical experiments of Dareste on the development of the embryo in the hen's egg. He has shown that by altering the environment malformations and monstrosities may be artificially produced. By raising or lowering the temperature of the surrounding air, by covering the shell of the egg with varnish, by placing the eggs vertically, etc., he succeeded in so disturbing the healthy development of the embryo—for example, by the arrest of development of blood vessels—as to lead to the production of monstrosity and disease.

2. Féré, by injecting alcohols and aldehydes into hen's eggs during incubation, was able to cause arrest of development and malformations in the chick, showing that the local action of alcohol is to arrest development.

3. Prochownik some years ago found that by feeding women on a nitrogenous diet during pregnancy a smaller child was produced, and he advocated this treatment in the case of women with small pelvises.

4. Interesting speculations are raised by some recent work done in the University of Edinburgh showing the result of feeding rats on a non-physiological diet. In the *Proceedings of the Royal Society of Edinburgh* for 1905 Chalmers Watson described the clinical results obtained in an experimental investigation on the influence of an excessive meat diet on the growth and nutrition of rats. It was there shown that the progeny of meat-fed rats are unusually poorly developed and show a high mortality in early life.

In a later communication (October, 1906) he describes the influence of an excessive meat diet on the osseous system, profound skeletal changes being produced. In the same volume Dr. Watson shows that (a) a meat diet is prejudicial to the occurrence of pregnancy in rats; (b) in rats fed on a meat diet the mammary development of nursing mothers is less than in rats fed on bread and milk.

5. Palazzi² had already shown that by the daily hypodermic injection of doses of alcohol in rabbits he was able to induce sterility in about 50 per cent.

6. It is a matter of common observation that the children of drunken women are ill-nourished and degenerate.

Our knowledge of the influence of diet and surroundings on the pregnant uterus and the embryo is as yet limited and inexact, but there is reason to believe that this influence is of far-reaching effect, and that the care of the expectant mother is a matter of the highest physiological importance. We have in the past approached these and other matters too much from the standpoint of their influence upon the mother. A radical change would seem desirable, and I would urge the paramount necessity of regarding them from the standpoint of their influence on the unborn child.

Time will only permit a glance at one or two of the more important matters.

1. Food.

The regulation of the mother's food is worth careful thought both as to its quality and its quantity.

(a) *Quality*.—It is our everyday experience to be consulted by women suffering from all manner of ills, the results of auto-intoxication from improper and unsuitable food, sickness and constipation, itchings, depression, sleeplessness and headache, neuralgia, and abnormal desires! And if these harmful effects are seen in the health of the mother, how much more powerful must the influence on the fetus be! I have alluded to the effect of improper dieting of animals; if, then, a pregnant woman persists in indulgence and high living, it is probable that

she is laying up for her offspring troubles which will show themselves in the lapse of time—not improbably is she depriving her child of its power of procreation and laying the seeds of much ill-health and future misery.

(b) *Quantity*.—It is a popular impression that as there are now “two mouths to fill,” as it were, the expectant mother must eat, perhaps, twice her usual amount! But there is no greater and, perhaps, no more harmful fallacy. It is necessary only to think of the amount of food required by the newborn child to form an adequate idea as to how much additional food the expectant mother needs for the proper nourishment of her unborn child.

Even after birth, when the child is doing much more work—for example, by the exercise of its respiratory muscles and its digestive and excretory organs and by the maintenance of its own body temperature, even with these additional demands, the newborn child requires only *half a pint of milk a day*.

The majority of pregnant women eat far too much, and this intemperance in food is a matter which we as a profession should set our influence against.

But whilst overfeeding is injurious to the child, on the other hand, without the necessary amount of food a woman cannot produce a healthy child, and, as I hold that an unborn child has a right to conditions which make for the safeguarding of its health, I equally hold that it is the duty of the State to provide a sufficiency of food for every necessitous woman in her pregnancy.

2. Drugs and Drink.

The increasing tendency of pregnant women to make use of all sorts of drugs—antipyrin, phenacetin, chloral, sulphonal, and cocaine—must be mentioned only to be condemned; it is one of the features of this neurasthenic age; the discomforts of pregnancy, due largely to the intemperate dietary, must be counteracted by the exhibition of drugs. It is needless to point out that all these drugs are active poisons, and I have no doubt that many abortions are produced and many “degenerates” born as the result of their indiscriminate and common use. But of all drugs alcohol is perhaps the most commonly used and abused; its deleterious effects on pregnancy are so pronounced and so evident that perhaps I may be allowed to allude to this matter at rather greater length.

Alcohol.

My experience in gynaecology and obstetrics is simply this—that *indulgence in alcohol is almost invariably harmful in its effects upon the woman who is the subject of gynaecological disease, and upon the child of the woman who is pregnant; but as the matter is one of national importance, I will rather give the opinions of others.*

In a very instructive article on Alcoholism in Relation to Infantile Mortality, Professor Sims Woodhead refers to the well-known action of alcohol in “slowing down the metabolic processes of the body, and its influence in paralysing or lowering the activity of the cells as regards their power of taking up nutriment.” He points out with how much greater effect this pharmacological action must tell upon the delicate growing tissues of the child.

He says: “I believe that every medical man who has attended a large number of confinements in districts in which drink is—if one may put it in that way—endemic, will be able to call to mind evidence that the children of a drunken mother have almost without exception been poor wretched little weaklings, that bring into the world with them little chance of living the allotted span of life.”

Now, the physiology of the placenta, its filtering action, is a very difficult subject; and though I think it has been experimentally proved that alcohol does pass from the maternal blood directly into the blood and tissues of the fetus, and, if so, must have a directly deleterious effect, yet it is not essential to insist upon this; it is enough that alcohol does, according to its amount, paralyse, or inhibit, or impair the nutrition of the mother, and thus indirectly must affect her child.

Matthews Duncan, who was one of the keenest of clinical observers, in an article On Alcoholism in Gynaecology and Obstetrics, shows from his own experience that the continued indulgence in alcohol exercises a harmful influence upon the whole reproductive processes in women, producing sterility, abortion, premature labour, stillbirths, and the birth of weakly offspring.

Striking statistics have been published on this subject—for example, those of Dr. Sullivan, who investigated the reproductive history of chronic female drunkards in the Liverpool prison. He found:

1. That of 120 female inebriates there were born 600 children, of whom 55.8 per cent. were deadborn, or died under two years; in the case of sober mothers the rate was only 23.9 per cent.

2. That there was a progressively augmenting character of the influence of the mother's alcoholism shown by the progressively increasing death-rate in the alcoholic family; the rate of stillbirths showing almost as marked a tendency to regular increase as did the death-rate among the children born alive, amongst those later born as compared with the firstborn children.

3. That there was a higher death-rate among the children of the mothers whose inebriety developed at an early period—for example, of 31 women who began to drink at least two years before their first pregnancy, 118 children were born, of whom 62.7 per cent. were deadborn or died in infancy.

4. Further, that residence in prison with abstinence from alcohol often enabled an inebriate woman to give birth to a living and surviving child.

Professor Sims Woodhead draws attention to another important matter—that is, the action of alcohol in rendering an individual more susceptible to various diseases, and says, “The child of an alcoholic mother must come into the world with an enormously diminished immunity to disease.”

There can be little doubt that alcoholism is the direct cause of disease and death before the child is born, and short of this it is the cause of such ante-natal disease and deformity as to lead to much infantile mortality.

3. Mole of Life.

The mental state of the pregnant woman is a subject of great importance. There is a popular idea as to maternal impressions, for which as yet there is no scientific support; but there can be no doubt as to the fact that the life of the fetus can be affected by mental states of the mother; it is no unusual event in our experience to see instances where abortion follows a state of mental excitement or shock; the exact pathology is not yet understood, though most probably the damage is induced by the excitation of uterine movements which harmfully affect the uterine contents. If this is possible, why should not similar influences, acting to a lesser degree, produce effects upon the health or vitality of the child which will have far-reaching effects? Hence the importance of insisting upon the proper surroundings and mode of life of the expectant woman. It is her duty to her child, and the child has the right to claim that she shall so order her life as to favour the proper development of her child.

4. Work.

Overwork and excessive exercise leading to physical fatigue are just as harmful, both to the mother and her child, as laziness and want of exercise and the semi-invalidism into which so many pregnant women resign themselves.

Unrestricted factory work is not only injurious to the pregnant woman, as subjecting her to the risks of premature confinement and prejudicing her health so as to render her less fitted to undergo the strain of pregnancy and suckling, but there can be no doubt that it equally affects the unborn child, both by causing its premature birth and injuriously affecting its vitality.

This, I think, is universally admitted, but the most striking evidence I have come across is that of Dr. Reid, the Medical Officer of Health for Staffordshire. In that county the artisan population is grouped together, Dr. Reid tells us, in two large centres, north and south, the intervening area being rural in character. While the health conditions of the two groups are almost identical, in the north a very large number of women are engaged in factory labour, in the south there is practically no trade employment for women. Dr. Reid shows that abnormalities and stillbirths occur in these two districts in the following proportions:

		Abnormalities.	Stillbirths.
North	150 ...	94
South	60 ...	3.2

That is, amongst the factory workers stillbirths are three times as frequent.

Dr. Reid further points out that “the damage done cannot be entirely measured by mortality figures, for

these take no account of the impaired vitality of the infants who manage to survive to swell the ranks of the degenerate."

The only remedy is for the State to make abstention from work by pregnant women compulsory and to provide food in cases of necessity; the latter is, indeed, now possible under our present methods of Poor-law administration, and it is improbable that Boards of Guardians would refuse relief. The important thing would be to prohibit pregnant women from going to work at all, and, as I have pointed out before, it is as important from the standpoint of the child that this prohibition should include the early as the later months of pregnancy. Until that comes about we, as medical practitioners, can assist by educating the public opinion to the point that it is a disgrace for any man to allow his wife to go out to work during pregnancy.

5. The Provision of Natural Food for the Newborn Child—that is, the Care of the Breasts.

The care of the unborn child would be incomplete without providing for it, when born, its natural food. Those conditions which go to the building up of a healthy child go also to the providing of the mother's milk. It is admitted on all hands that there is no real substitute for breast-feeding, and it seems to me that every child born has the right to its mother's milk, that no woman has any moral right to bear a child who is not prepared (if able) to suckle her child. Any woman, indeed, who, for the sake of her own selfish pleasure or convenience, wilfully deprives her child of its right to have what Nature intended for it is guilty of a mean and cruel theft, the meaner that it is a theft from one without the power to protect itself, and the crueller in that the evil consequences cannot be foretold. Such a woman is a degenerate, and, if ever it should come to be recognized that sterilization of degenerates is right, then such a woman ought to be amongst the first to be sterilized!

Unfortunately, it is not always a matter of choice, for the incapacity to suckle is increasing rapidly. One of our members, Dr. Martin, the Medical Officer of Health for Gorton, whose power of graphic diction is well known to us, in his annual report has said:

So complete is the female wreck of the rising generation that the young man of to-day, on taking to himself a wife, actually marries but part of a woman, the other part being exhibited in the chemist's shop window in the shape of a glass feeding-bottle!

I allude to this matter now because much can be done to prevent this state of affairs by proper care and regulation of life during pregnancy; but there is one factor to which attention must be especially drawn: the increasing incapacity of the woman of to-day to suckle her child is to no small extent the result of alcoholism.

There is no doubt that the immoderate use of alcohol by pregnant women does inhibit the development of the mammary glands and produce incapacity to suckle her child; but beyond this evidence is accumulating to show that this incapacity is handed on to succeeding generations. A most striking observation is recorded by Bunge, "that the immoderate use of alcohol on the part of the father appears to interfere very seriously with the development and function of some of the most active glands of the daughter," and that "where the father is a drinker the daughter loses the power of suckling her child; moreover, this power is lost for coming generations." These facts, if true, are sufficiently important to make us pause and, as medical men, to discourage the use of alcohol in any form during pregnancy.

We may summarize these matters in terms of the rights of the unborn child and the necessary sequences of their recognition.

In these days, when almost every class is loudly clamouring for its rights, it may be wellnigh impossible to gain official hearing for the rights of a class which cannot make itself heard. Nevertheless, with the recognition of these rights is largely bound up the future of our race and of our country, and we must press their claims. We must recognize the right of the unborn child:

1. To life.
2. To protection from the hereditary taint of degeneracy.
3. To health—that is, to conditions conducive to the safeguarding of its health.

4. To its natural food when born—that is, its mother's milk.

5. To its natural protection when born—that is, its mother's care.

The recognition of these rights involves the recognition of certain duties on the part of the parents and the State, to which I have drawn attention in the substance of my remarks, the most pressing being:

1. The question of abstention from alcohol.
2. The provision of food for the pregnant and nursing mother by the State.
3. Legislation in connexion with the prohibition of women's work, and the registration of births, stillbirths, and fetal death.

These are doubtless big demands, but they deal with a big question, namely, the numerical diminution of our population and the degeneration of its quality.

The proper care of the unborn child and the recognition of its rights, as I have endeavoured to show, are among the most important means of combating the tendencies of the day, for the outstanding fact is that

Diminishing vitality of the child and

Increasing incapacity for breast-feeding on the part of the mother

are the two great causes of that infantile mortality and morbidity which are leading to the deterioration and depletion of our race. May I end this address by quoting the words of John Burns, who states the same thing in another way?

I believe at the bottom of infant mortality, high or low, is good or bad motherhood. Give us good motherhood and good prenatal conditions, and I have no despair for the future of this or any other country. I believe what the prenatal condition of the mother is, so her offspring will be.

First concentrate on the mother. What the mother is, the children are. The stream is no purer than the source. Let us glorify, dignify, and purify motherhood by every means in our power.

APPENDIX.

THE RIGHTS OF THE UNBORN CHILD.

We must recognize the rights of the unborn child—

1. To life.
2. To protection from the hereditary taint of degeneracy.
3. To health—that is, to conditions conducive to the safeguarding of its health.
4. To Nature's food (when born)—that is, its mother's milk.
5. To its natural protection (when born)—that is, its mother's care.

The recognition of these rights demands the recognition of the following duties on the part of the parents, the profession, and the State—

1. On the part of the parents:
 - A clean and normal life before and after conception.
2. On the part of the mother:
 - a. The consistent regulation of her mode of life.
 - b. The abstention from alcohol.
 - c. The feeding of the child by the breast.
 - d. The care of the child after birth.
3. On the part of the medical profession:
 - a. The restriction of therapeutic feticide.
 - b. The education of a healthy public opinion.
4. On the part of the State:
 - a. Restriction of procreation to the fit—
 - i. By the regulation and restriction of marriage to the fit either by education or legislation.
 - ii. By the prevention of procreation by the unfit—whether by segregation of the unfit, or sterilization of degenerates, or the evolution of a healthy public opinion.
 - b. Regulation of the life of the pregnant woman:
 - i. By State provision of food for the necessitous.
 - ii. By provision of hospitals for the reception of women during pregnancy.
 - iii. By State prohibition of woman's work and employment during pregnancy.
 - c. Immediate registration of (a) stillbirths, (b) premature labours, (c) abortions, and if practicable I would add pregnancy.
 - d. Registration of birth within twenty-four hours.
 - e. Regulation of the life of the woman who has given birth to a child:
 - i. By State provision of food for the necessitous.
 - ii. By State prohibition of woman's work for at least six months after confinement.